

A Framework for Sustainable Competition in the Digital Age:

FOSTERING CONNECTIVITY, INNOVATION
AND CONSUMER CHOICE



Competitive Carriers Association
Rural • Regional • Nationwide®

Executive Summary

Newly confirmed Federal Communications Commission (FCC or Commission) Chairman Tom Wheeler, nearly two years ago, observed that:

“The history of the world is dotted with only a handful of transformational moments. We happen to be living through one of them right now. We are building history’s fourth great network-driven transformation ... the result of the inexorable increase in computing power expressed in Moore’s Law and the unprecedented connectivity of wireless communications. Together, they create the most powerful and pervasive platform on the planet.

He also noted that “government initiatives ... [have] always led the path to new communications realities” and that “now is the time to continue that leadership legacy.”

In March 2013, the FCC released a sobering report on the state of mobile wireless competition in the United States. For the third straight year, the Commission was unable to certify that the mobile wireless industry is characterized by “effective competition,” confirming the highly (and increasingly) concentrated nature of the wireless industry in the hands of the two largest providers.

This competitive assessment should serve as a wake-up call to policymakers. History shows that preserving and enhancing wireless competition is a vital means of driving economic growth and job creation, maintaining our nation’s global competitiveness, promoting continued innovation, and enhancing consumer welfare. But allowing the wireless industry to continue its steady march back towards the duopoly of the early 1990s would not only rob consumers of these benefits, but also hold back the nation’s ongoing economic recovery.

For many years, from the mid-1990s to the late 2000s, the U.S. wireless industry was a shining example of robust competition, with numerous carriers at the national and regional level competing to deliver steadily improving services at declining prices. But wireless competition can thrive only where there are effective safeguards in place to prevent the exercise of market power—rules and policies that prohibit excessive consolidation and preserve access to key inputs like spectrum, devices, and networks. Unfortunately, the Commission has chosen to relax many of those safeguards over the years and has sometimes failed to adequately enforce its competition policies. The inevitable result has been increased consolidation of the wireless industry and a decline in the competitive benefits flowing to consumers. As the industry edges ever closer to a duopoly, with AT&T and Verizon dominating the marketplace and foreclosing opportunities for smaller rivals, the Commission must reexamine whether its rules and policies are promoting competition effectively. (*See charts, page ii*)

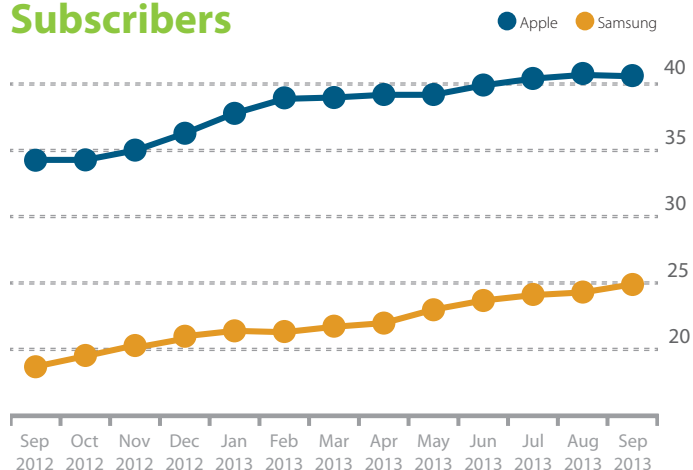
To that end, Competitive Carriers Association (CCA)—an organization representing the interests of more than 100 competitive wireless carriers, including rural, regional, and national providers—proposes the creation of a Wireless Competition Task Force at the FCC. Policymakers routinely affirm that ensuring effective competition in the wireless industry is of paramount importance. But translating words into action will require a comprehensive and concerted vision and an urgency of purpose involving personnel throughout the Commission—a project particularly well suited to an agency-wide Task Force.

The Task Force should be charged with analyzing, developing, and implementing proposals for promoting wireless competition in the 21st century and should focus on accelerating work on six initiatives: (1) overhauling the Commission’s “spectrum screen” to assess market concentration more accurately and to strengthen the Commission’s competitive review of wireless transactions, (2) conducting fair and procompetitive spectrum auctions,

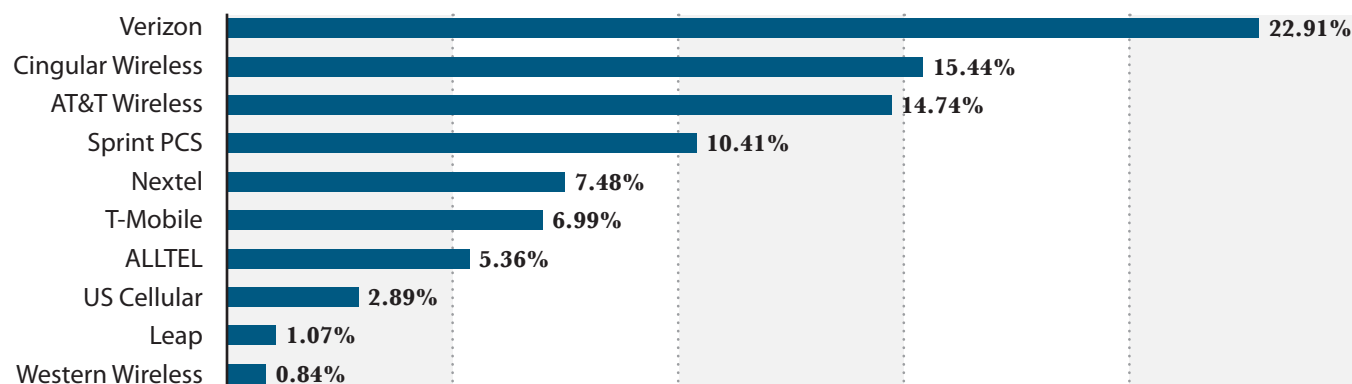
Executive Summary

(3) ensuring commercially reasonable access to data roaming arrangements, (4) maintaining essential access to wireline facilities and interconnection as the telecommunications industry transitions to Internet Protocol technology, (5) promoting unfettered access to wireless devices, and (6) reestablishing competitive neutrality in the Commission's high-cost universal service support mechanisms. We wholeheartedly agree with Chairman Wheeler that now is the time for the FCC to build on its historical leadership in fostering a competitive wireless sector. As this White Paper will explain, CCA's proposed measures will remove barriers to competition, boost the nation's economy, and deliver substantial benefits to consumers.

Share (%) of Smartphone Subscribers

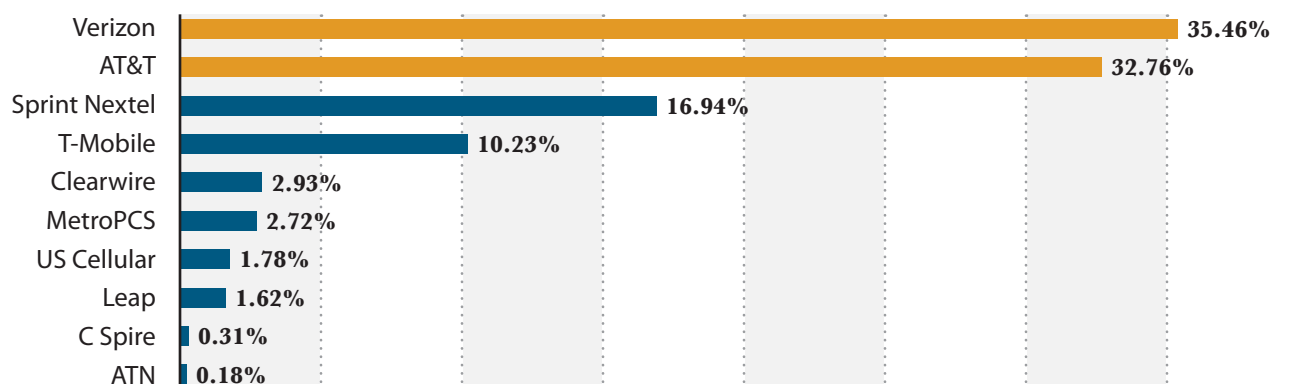


Percentage of Top Ten Carriers' Subscriber Share, Year End 2002



Source: Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Eighth Report, 18 FCC Rcd 14783 (2003).

Percentage of Top Ten Carriers' Subscriber Share, Year End 2012



Source: FierceWireless, Grading the Top 10 U.S. Carriers in the Fourth Quarter of 2012 (Mar. 15, 2013), available at <http://www.fiercewireless.com/special-reports/grading-top-10-us-carriers-fourth-quarter-2012>. Note that the fifth and sixth largest providers (Clearwire and MetroPCS, respectively) have since exited the marketplace, and the newly-minted sixth largest provider (Leap) is in negotiations to be acquired by AT&T. Additionally, Verizon posted 941,000 retail postpaid net additions in 2Q13; AT&T posted 551,000 additions for the same period. See Verizon Communications Investor Quarterly 2Q 2013 (July 18, 2013), available at http://www2.verizon.com/investor/DocServlet?doc=2013_2q_qb_vz.pdf; AT&T Inc. Investor Briefing 2Q 2013 (July 23, 2013), available at http://www.att.com/Investor/Earnings/2q13/ib_final_2q13.pdf.

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COMPETITION FOR THE DIGITAL AGE

We are living through the historical transformation of the “fourth network revolution”.¹ The first revolution was spurred by Gutenberg’s printing press in the 15th century, which helped to produce a technology-based network of commercial print shops. The second and third revolutions occurred in the 19th century. The railroad prompted a high-speed network revolution tearing down geographic limitations, and the telegraph helped to create the first electronic network prompting a revolution of communications. The Internet, coupled with the connectivity of wireless broadband, is the fourth network revolution, shifting control over communications from a central locus to the populous. With the right framework of competitive policies, this network revolution has the power to transform all aspects of human existence.

Commissioner Rosenworcel succinctly observed recently that “access to mobile broadband is becoming an essential part of everything we do.”² We are just beginning to see how wireless technology is transforming education, healthcare and banking, to name a few. Mobile broadband networks will continue to enable countless innovations impacting economic, education, social, and public safety aspects of daily life. For this transformation to encourage and inspire further innovation and expansion, competitive safeguards must exist. The fourth network revolution, like the three previous, is creating instability and chaos. The FCC has a unique opportunity to harness the power of this revolution by creating a competitive framework that will productively channel this chaos and allow access and connectivity for all.

For example, after nearly a century of stagnation under a monopoly regime, reintroducing competition to wireline networks sparked the broadband revolution. In the same

vein, the realization of real-time data and connectivity through mobile networks requires a competitive environment. The FCC must therefore ensure that its competition policy framework will effectively protect and promote the fourth network revolution and all the benefits that flow from it. Specifically, the Commission should convene a group of its best and brightest thinkers to conduct a holistic review of the major obstacles and opportunities to sustain a competitive wireless industry, and promptly act to implement recommendations curated through the Task Force process.

For the last three years, the Commission was unable to certify that the mobile wireless industry is characterized by “effective competition,” confirming the highly (and increasingly) concentrated nature of the wireless industry in the hands of the two largest providers.³ Though not surprising, this competitive assessment should serve as a wake-up call to policymakers, as enhanced wireless competition would help maintain our nation’s global competitiveness, promote continued innovation and enhance consumer welfare. As Chairman Tom Wheeler confirmed during his first days in office, “During my confirmation hearing I described myself as ‘an unabashed supporter of competition because competitive markets produce better outcomes than regulated or uncompetitive markets.’ Yet we all know that competition does not always flourish by itself; it must be supported and protected if its benefits are to be enjoyed.”⁴ The Commission should therefore not allow the wireless industry to continue its steady march back towards duopoly.

For many years, from the mid-1990s to the late 2000s, the wireless industry in the U.S. was a shining example of robust competition, with numerous carriers at the national and regional level competing to deliver steadily improving

¹ Tom Wheeler, “Making Our History,” Mobile Musings, Dec. 1, 2011, available at <http://www.mobilemusings.net/2011/12/making-our-history.html>.

² Statement from FCC Commissioner Jessica Rosenworcel Regarding Presentation on Measuring Broadband America FCC Speed Test App, Nov. 14, 2013, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-324153A1.pdf.

³ Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services, Sixteenth Report, 28 FCC Rcd 3700, ¶¶ 14-15 (2013) (“16th Wireless Competition Report”).

⁴ Opening Day at the FCC: Perspectives, Challenges, and Opportunities, <http://www.fcc.gov/blog/opening-day-fcc-perspectives-challenges-and-opportunities> (Nov. 5, 2013) (hereafter “Chairman Wheeler First Day Perspectives”) (quoting *Hearing on the Nomination of Thomas Wheeler to be Chairman of the Federal Communications Commission Before the S. Comm. on Commerce, Science, & Transportation*, 113th Cong. (Jun. 18, 2013) (statement of Thomas E. Wheeler).

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services at declining prices. The success of wireless competition stood in stark contrast to the monopoly conditions that had historically prevailed in the wireline telephony arena, proving that where effective competition exists, heavy-handed, utility-style regulation is unnecessary. Wireless competition can be sustained and, even better, thrive where there are effective safeguards in place to prevent the exercise of market power—rules and policies that, among other things, prohibit excessive consolidation and preserve access to key inputs like spectrum, devices, and networks.

Unfortunately, the Commission has not implemented those safeguards over the years and, with the exception of its laudable support to block AT&T's failed attempt to take over T-Mobile, has sometimes failed to adequately enforce its competition policies. It is no wonder that today as the Commission's own competition reports show, the wireless industry has become increasingly consolidated. The inevitable result has been a decline in the competitive benefits flowing to consumers. As the industry edges ever closer to a duopoly, with AT&T and Verizon dominating the marketplace and foreclosing opportunities for smaller rivals—while simultaneously upending the promise of wireless substitution for wireline services and the concomitant benefits of such intermodal competition, the Commission must reexamine whether its rules and policies are promoting competition effectively.

To that end, Competitive Carriers Association (“CCA”)—an organization representing the interests of more than 100 competitive wireless carriers, including rural, regional, and national providers—proposes the creation of a Wireless Competition Task Force at the FCC. Policymakers routinely affirm that ensuring effective competition in the wireless industry is of paramount importance. But translating words into action will require a comprehensive and concerted vision and an urgency of purpose involving personnel throughout the Commission—a project particularly well suited to an agency-wide Task Force.

The Task Force should be charged with analyzing, developing, and implementing proposals for promoting wireless competition in the 21st century. In particular, the Task Force should focus on accelerating work on six initiatives that are central to restoring the conditions for a truly competitive wireless marketplace: (1) overhauling the Commission's “spectrum screen” to assess market concentration more accurately and to strengthen the Commission's

As the industry edges ever closer to a duopoly ... the Commission must reexamine whether its rules and policies are promoting competition effectively.

competitive review of wireless transactions, (2) conducting fair and procompetitive spectrum auctions, (3) ensuring commercially reasonable access to data roaming arrangements, (4) ensuring access to wireline networks and interconnection as the telecommunications industry transitions to Internet Protocol technology,⁵ (5) promoting competitive carriers' and consumers' access to wireless devices, by working with the Administration and Congress to restore the copyright exemption for handset unlocking, and (6) restoring competitive neutrality to the Commission's high-cost support mechanisms as part of the ongoing effort to reform the Universal Service Fund (“USF”). As this White Paper will explain, these measures will help prevent the industry from sliding back into duopoly, and will remove barriers to competition from carriers currently being marginalized by AT&T and Verizon.

⁵ This would include expeditiously addressing market power abuses in the special access market.

WIRELESS COMPETITION HAS BEEN AN IMPORTANT DRIVER OF CONSUMER WELFARE AND ECONOMIC GROWTH

Every FCC Chairman since 1994—the year the first wireless spectrum auctions were conducted—has recognized that wireless competition brings tremendous benefits to consumers and should be actively promoted by the Commission. The list begins with Chairman Reed Hundt, who oversaw the first PCS spectrum auctions. According to Chairman Hundt, the Commission’s “fundamental policy is competition” in the wireless context.⁶ He went on to articulate “three principles that should guide our pro-competitive policy: choice, fairness and opportunity.”⁷ These principles have continued to serve as cornerstones of the Commission’s articulated policies towards the wireless industry, even if they have not always translated into concrete action to protect competition in recent years.

Chairman Hundt’s successor, Chairman William Kennard, called competition “the driving force of our law and policy” and “certainly the driving force in the wireless industry.”⁸ But, importantly, he stressed that “[t]rue competition requires that everyone play by the rules” and that the Commission must “make sure that happens.”⁹ Chairman Michael Powell echoed these sentiments, explaining that as demand for mobile wireless services continued to grow, “it is imperative that the Commission and Congress continue to work together to ensure customers can benefit from in-

creased carrier competition and continue to enjoy new and innovative products and quality service.”¹⁰ Chairman Kevin Martin recognized that newly emerging wireless broadband services had “become increasingly critical drivers of both economic and social development,” and that the Commission should “take significant steps to advance the roll out of wireless broadband Internet access to consumers across the country.”¹¹

More recently, Chairman Julius Genachowski repeatedly affirmed the Commission’s commitment “to ensuring a competitive mobile marketplace that drives innovation and investment, creates jobs and benefits consumers.”¹² As recounted by Chairman Genachowski, “FCC auctions and competition in the wireless voice market over the past 15 years have spurred investment, extraordinary innovation, and in many cases new and improved services for flat or lower prices for American consumers.”¹³ Chairman Genachowski also recognized the high stakes involved in the Commission’s ongoing efforts to promote such competition, explaining that it is “vital that competition continue to serve these goals as consumers and industry migrate from voice to high-speed data and 4G mobile broadband and these services are extended to all Americans.”¹⁴

⁶ FCC, “Chairman Reed E. Hundt Addresses PCIA Convention, Reaffirms Commitment to Competition in PCS,” Sep. 23, 1994, available at <http://transition.fcc.gov/Speeches/Hundt/spreh428.txt>.

⁷ *Id.*

⁸ FCC, “Speech of Chairman William E. Kennard, CTIA Convention, New Orleans, LA,” Feb. 9, 1999, available at <http://transition.fcc.gov/Speeches/Kennard/spwek906.html>.

⁹ *Id.*

¹⁰ Statement of Chairman Michael K. Powell, at 1, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, Ninth Report, 19 FCC Rcd 20597 (2004).

¹¹ Statement of Chairman Kevin Martin, at 1, *Sprint Nextel Corporation and Clearwire Corporation; Applications for Consent to Transfer Control of Licenses, Leases, and Authorizations*, Memorandum Opinion and Order, 23 FCC Rcd 17570 (2008).

¹² Statement from FCC Chairman Julius Genachowski Regarding AT&T Inc.’s Abandonment of Its Proposed Acquisition of T-Mobile USA Inc., Dec. 19, 2011, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-311592A1.pdf; see also Statement of Chairman Julius Genachowski, at 1, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services*, Fourteenth Report, 25 FCC Rcd 11407 (2010) (“Genachowski Statement on 14th Report”).

¹³ *Id.*

¹⁴ *Id.*

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These are “exciting times for consumers.”¹⁵ The new Chairman has described wireless technology as “the greatest revolution in human communication since prehistoric man began to paint on cave walls.”¹⁶ But, as Chairman Wheeler has explained, “[i]t’s competition that drives the extension of networks, it’s competition that drives the quality of the throughput, [and] it’s competition that decides the pricing” of services for consumers.¹⁷

In addition to its consumer benefits, a vibrantly competitive wireless industry also can play a key role in spurring economic growth, as several of the Chairmen quoted above recognize and as multiple recent studies confirm. Where competition exists, carriers in the industry will be encouraged to “invest billions expanding [their] infrastructure,” thereby creating jobs in the industry and enhancing productivity for users of new mobile broadband services.¹⁸ Similarly, Chairman Genachowski explained that “[h]aving world-leading mobile networks and services will be essential to our nation’s global competitiveness, and to creating jobs and growing the economy here in the United States.”¹⁹ A 2011 study by Dr. Raul Katz of Columbia University confirmed the positive impact that a competitive wireless industry can have on jobs, estimating that making competitive wireless broadband available to rural America would generate nearly 117,000 jobs between 2011 and 2014 and increase the median income in rural areas by an average of over \$1,200.²⁰ Another study released in May 2012 similarly found that the wireless industry is “the essential engine of U.S. economic growth”—supporting 3.8 million jobs (directly or indirectly) and contributing \$146.2 billion to the nation’s GDP in 2011.²¹

For years, the mobile wireless sector was hailed as “one of the great success stories” of the Commission’s efforts to establish and maintain a regulatory framework in which competition, consumer welfare, and economic growth could thrive.²² The wireless industry began as a duopoly, with a total

“Having world-leading mobile networks and services will be essential to our nation’s global competitiveness

of 50 MHz of cellular spectrum in each local area divided between just two providers.²³ But the duopoly was broken in 1994, when the Commission first used its newly minted auction authority to make available 120 MHz of broadband PCS spectrum, enough to give rise to numerous competitive carriers across the country.²⁴ Subsequent auctions in the SMR, AWS, 700 MHz, and other bands enabled further competition. As a result, in the first 13 Wireless Competition Reports released between 1995 and 2009, the Commission was able to conclude that the wireless industry was characterized by either growing competition or “effective competition,” as up to six national providers with relative balanced market shares battled to attract and retain customers.²⁵

In the nearly 20 years since competitive carriers first arrived on the scene, the key ingredients for sustaining and growing competition in the wireless industry and further advancing the fourth network revolution have become readily apparent.

- **Strong anti-consolidation policy:** To begin with, a competitive wireless marketplace needs robust FCC review of potential consolidation in the industry, in order to prevent the two largest carriers from aggregating market power and foreclosing opportunities for competitive carriers.

¹⁵ Tom Wheeler, “Grab Your Partner,” Mobile Musings, Jun. 10, 2010, available at <http://www.mobilemusings.net/2010/06/grab-your-partner.html>.

¹⁶ *Id.*

¹⁷ Howard Buskirk, *Wheeler Says He’s Had Months to Think About Incentive Auction, IP Transition*, Comm. Daily, Nov. 8, 2013, at 2.

¹⁸ Tom Wheeler, “The Wireless Way Out,” Mobile Musings, Mar. 26, 2009, available at <http://www.mobilemusings.net/2009/03/wireless-way-out.html>.

¹⁹ Genachowski Statement on 14th Report at 1.

²⁰ Dr. Raul L. Katz, et al., “Economic Impact of Wireless Broadband in Rural America,” at 8-9 (2011), available at http://www.teleadvs.com/wp-content/uploads/RCA_FINAL.pdf.

²¹ Roger Entner, “The Wireless Industry: The Essential Engine of U.S. Economic Growth,” at 4 (2012), available at <http://apps.fcc.gov/ecfs/document/view.jsessionid=KKDdQLCSVmlSq66DvmdylQLdn1BKnfcs1K4HhQvy1RPzFzFJQKs10070831011-224088840?id=7022009489>.

²² See CTIA, Interview with Kevin Martin, at 6, *Wireless Wave* (Fall 2005), available at <http://www.ctia.org/advocacy/index.cfm/AID/10522>.

²³ *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, First Report, 10 FCC Rcd 8844 ¶¶ 3, 4 (1995).

²⁴ *Id.* ¶ 4 (noting that broadband PCS spectrum was believed to be sufficient to give rise to “at least three, and possibly as many as six, new competitors to the cellular carriers in each market”).

²⁵ See, e.g., *id.* ¶ 2 (noting the “growing competition” in the wireless industry); *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Thirteenth Report, 24 FCC Rcd 6185 ¶ 1 (2009) (“The metrics . . . indicate that there is effective competition in the CMRS market and demonstrate the increasingly significant role that wireless services play in the lives of American consumers.”).

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- **Access to critical inputs:** The Commission also must ensure that competitive carriers retain access to certain essential inputs for their service offerings. As former Chairman Hundt reiterated in a recent paper, the Commission cannot take a *laissez-faire* approach when it comes to preserving access to these vital inputs; rather, in each case, the Commission must “step in with new, pro-competitive rules to ensure consumers benefit to the extent possible.”²⁶
- **Spectrum:** “Spectrum is the lifeblood of the wireless industry,”²⁷ and “[a]ccess to spectrum is a precondition to the provision of mobile wireless services.”²⁸ Ensuring the availability of sufficient spectrum—both by preventing undue spectrum aggregation by the largest carriers, ensuring that competitive carriers have access to complementary spectrum needed to effectively compete, and by setting appropriate rules for auctioning new spectrum—is “critical for promoting the competition that drives innovation and investment.”²⁹ As former FCC Chief Economist Jonathan Baker warned in a recent study, “[i]f a small number of incumbent providers end up with control over large amounts of spectrum, those incumbents may have the incentive and ability to frustrate the development of new technologies and business models brought to the market by smaller rivals and potential competitors.”³⁰
- **Devices:** The Commission has recognized that “[h]andsets and devices are a central part of consumers’ mobile wireless experience, and a key way by which providers differentiate their offerings.”³¹ It is therefore increasingly important to ensure that the largest carriers cannot lock down devices, impede the interoperability of devices across platforms or spectrum bands, or otherwise prevent devices from being used on competitive carriers’ networks. The largest original equipment manufacturers should be encouraged to negotiate in good faith with competitive carriers for the purchase of iconic devices and the development of unique offerings.
- **Networks:** Finally, competitive carriers need access to the ubiquitous PSTN infrastructure that transmits voice and data services—an infrastructure that was funded by public ratepayers over decades and now is controlled predominately by AT&T and Verizon. Competitive carriers need access to infrastructure not only in the form of voice and data roaming on AT&T’s and Verizon’s wireless networks,³² but also in the form of access to facilities used for backhaul, transport and interconnection with those carriers’ affiliated wireline networks.³³ As the marketplace develops and technologies continue to change, it is critical that these roaming, interconnection and access obligations remain strong bulwarks against efforts to foreclose competition by denying network access.

26 Reed E. Hundt and Gregory L. Rosston, *Articulating a Modern Approach to FCC Competition Policy*, at 3 (Sep. 2013), available at http://www.techpolicyinstitute.org/files/hundt_rosston_articulating%20a%20modern%20approach%20to%20fcc%20competition%20policy.pdf (“Hundt/Rosston Paper”).

27 *Application of AT&T Inc. and Qualcomm Incorporated For Consent to Assign Licenses and Authorizations*, Order, 26 FCC Rcd 17589 ¶ 30 (2011) (“AT&T-Qualcomm Order”).

28 *Policies Regarding Mobile Spectrum Holdings*, Notice of Proposed Rulemaking, 27 FCC Rcd 11710 ¶ 4 (2012).

29 *Id.*

30 See Jonathan B. Baker, “Spectrum Auction Rules That Foster Mobile Wireless Competition,” at 5, WT Docket Nos. 12-268 and 12-269 (Mar. 12, 2013).

31 *16th Wireless Competition Report* ¶ 2.

32 See *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, Second Report and Order, 26 FCC Rcd 5411 ¶ 15 (2011) (“Data Roaming Order”) (“[T]he availability of roaming capabilities is and will continue to be a critical component to enable consumers to have a competitive choice of facilities-based providers offering nationwide access to commercial mobile data services.”).

33 See CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN, at 49 (2010), available at <http://download.broadband.gov/plan/national-broadband-plan.pdf> (“NATIONAL BROADBAND PLAN”) (“For consumers to have a choice of service providers, competitive carriers need to be able to interconnect their networks with incumbent providers.”).

COMPETITION IN THE WIRELESS MARKETPLACE IS NOW AT A CROSSROADS

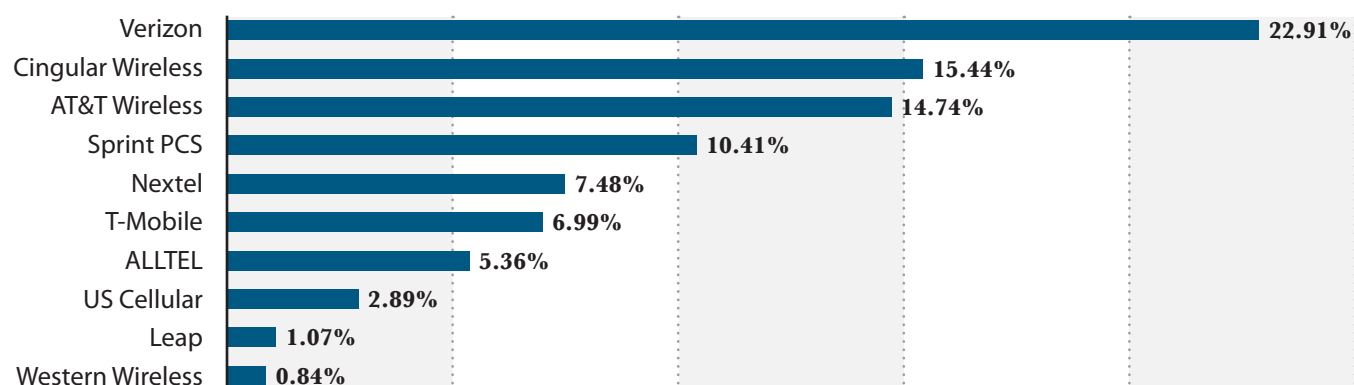
Despite the past success of competition in the wireless industry, today's marketplace is once again teetering on the brink of duopoly, dominated by the "Twin Bells," AT&T and Verizon. A spate of acquisitions by the Twin Bells in recent years has robbed the wireless marketplace of much of its former vibrancy.³⁴

The latest mobile competition report found that the wireless industry is highly concentrated and that such concentration has increased markedly in recent years.³⁵ The Report pointed to a steady increase in the Herfindhal-Hirschman Index (HHI), a common indicator of industry consolidation. The Report found that the wireless industry's HHI value had grown to 2,873 by the end of 2011—373 points higher than the level

considered "highly concentrated," and 722 points higher than the level measured in 2003 (the first year the Commission calculated HHIs).³⁶

The report also provided powerful confirmation of the growing dominance of the Twin Bells with respect to subscriber counts, while other remaining competitive carriers experience persistent subscriber losses.³⁷ The following two graphics demonstrate the increasingly excessive market power of these carriers with respect to subscriber counts, with the first graphic reflecting the relatively strong competition that existed in 2002, and the second displaying the dominance of the Twin Bells a decade later, at the end of 2012:

Percentage of Top Ten Carriers' Subscriber Share, Year End 2002



Source: Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Eighth Report, 18 FCC Rcd 14783 (2003).

³⁴ See 16th Wireless Competition Report ¶¶ 14-15; Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Mobile Conditions with Respect to Commercial Mobile Services, Fifteenth Report, 26 FCC Rcd 9664 ¶ 14 (2011) ("15th Wireless Competition Report"); Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services, Fourteenth Report, 25 FCC Rcd 11407 ¶ 16 (2010) ("14th Wireless Competition Report").

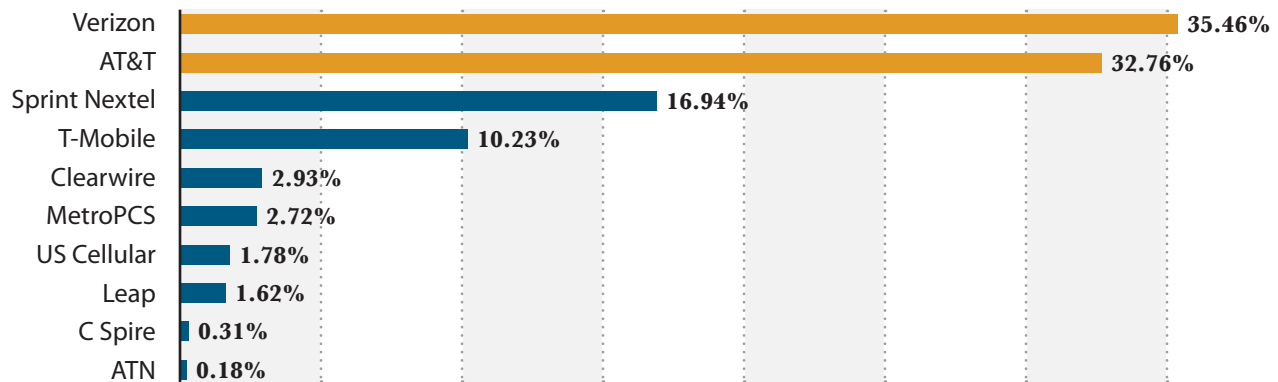
³⁵ 16th Wireless Competition Report ¶ 2.

³⁶ *Id.*

³⁷ See FierceWireless, Grading the Top 10 U.S. Carriers in the Fourth Quarter of 2012, Mar. 15, 2013, available at <http://www.fiercewireless.com/special-reports/grading-top-10-us-carriers-fourth-quarter-2012>

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Percentage of Top Ten Carriers' Subscriber Share, Year End 2012



Source: *FierceWireless*, Grading the Top 10 U.S. Carriers in the Fourth Quarter of 2012 (Mar. 15, 2013), available at <http://www.fiercewireless.com/special-reports/grading-top-10-us-carriers-fourth-quarter-2012>. Note that the fifth and sixth largest providers (Clearwire and MetroPCS, respectively) have since exited the marketplace, and the newly-minted sixth largest provider (Leap) is in negotiations to be acquired by AT&T. Additionally, Verizon posted 941,000 retail postpaid net additions in 2Q13; AT&T posted 551,000 additions for the same period. See Verizon Communications Investor Quarterly 2Q 2013 (July 18, 2013), available at http://www2.verizon.com/investor/DocServlet?doc=2013_2q_qb_vz.pdf; AT&T Inc. Investor Briefing 2Q 2013 (July 23, 2013), available at http://www.att.com/investor/Earnings/2q13/lb_final_2q13.pdf.

The Report also found that AT&T and Verizon together account for an astounding 67 percent of industry revenue.³⁸ Consistent with that finding, a recent FCC staff analysis issued in connection with AT&T's proposal to acquire T-Mobile observed that the Twin Bells account for 80 percent of industry EBITDA (without even accounting for several subsequent transactions).³⁹ By either metric, the Twin Bells' combined market share is far higher than the combined shares for the top two firms in other "consolidated" industries. By comparison, the top two firms in the auto industry hold a 35 percent share; the top two firms in the oil industry hold 24 percent share; and the top two firms in the banking industry hold a 20 percent share.⁴⁰ In all of these industries, greater consolidation has led to higher prices for consumers.⁴¹

Equally distressing were the Report's findings on the Twin Bells' steadily growing spectrum holdings. In particular, the Report indicated that AT&T and Verizon had entrenched their dominant position in spectrum holdings below 1 GHz—spectrum that is vital to competitive carriers'

ability to expand their network coverage in both rural and urban markets, as discussed further below. The Report found that the Twin Bells "together hold approximately 90 percent of Cellular spectrum based on megahertz-POPs (MHz-POPs), which was the first band to be licensed for commercial mobile services and has the most extensive network buildout."⁴² The Report also found that "Verizon Wireless holds 45 percent of the MHz-POPs of Cellular and 700 MHz spectrum combined, while AT&T holds approximately 39 percent."⁴³ The following chart summarizes the average spectrum holdings AT&T, Verizon, and other wireless providers, and clearly shows the dominant spectrum position of the Twin Bells, particularly in the low-frequency Cellular and 700 MHz bands. (*See table, page 9*)

This re-emerging wireless duopoly did not spring up overnight; the seeds have been taking root for more than a decade. As the GAO observed in a 2010 report, "[o]ver the past 10 years, consolidation in the wireless industry has generally been accomplished through a series of mergers and

³⁸ 16th Wireless Competition Report ¶ 52.

³⁹ *Applications of AT&T Inc. and Deutsche Telekom AG for Consent to Assign or Transfer Control of Licenses and Authorizations*, Staff Analysis and Findings, 26 FCC Rcd 16184 ¶ 37 (WTB 2011) ("AT&T-T-Mobile Staff Analysis").

⁴⁰ See Free Press, *Why the AT&T-T-Mobile Deal Is Bad for America*, Mar. 22, 2011, at 1, available at <http://www.freepress.net/sites/default/files/fp-legacy/ATT-T-Mobile.pdf>.

⁴¹ See STAN LUGER, CORPORATE POWER, AMERICAN DEMOCRACY, AND THE AUTOMOBILE INDUSTRY 44 (2005) (noting the Big Three automakers' "continued practice of annually raising prices" in the late 1990s); Gov't Accountability Office, *Effects of Mergers and Market Concentration in the U.S. Petroleum Industry*, at 1 (May 2004) (finding that "mergers and increased market concentration generally led to higher wholesale gasoline prices in the United States from the mid-1990s through 2000"); Mark J. Garmaise and Tobias J. Moskowitz, *Bank Mergers and Crime: The Real and Social Effects of Credit Market Capitalization*, *Journal of Finance*, Vol. LXI, No. 2, at 495 (Apr. 2006) (finding that "neighborhoods that experience greater reductions in bank competition due to bank mergers are subject to future higher interest rates, diminished local construction, . . . an influx of poorer households," and even "an associated increase in property crime").

⁴² 16th Wireless Competition Report ¶ 2.

⁴³ *Id.*

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Avg. Spectrum Holding (MHz)

| | Cellular | PCS | AWS | 700 MHz | MMDS/ AWS-4 | WCS | 2.5 GHz | TOTAL (weighted avg.) |
|--|-----------|------------|-----------|------------|----------------|-----------|------------|-----------------------------|
| AT&T | 22 | 34 | 4 | 23 | | | | 90 |
| Verizon | 25 | 17 | 26 | 29 | | | | 99 |
| T-Mobile | 0 | 26 | 33 | – | | | | 58 |
| Sprint* | 14 | 36 | – | – | | | | 50 |
| MetroPCS | – | 7 | 11 | 1 | | | | 19 |
| Leap | – | 6 | 13 | 1 | | | | 19 |
| US Cellular* | 7 | 7 | 7 | 5 | | | | 25 |
| NTELOS | – | 23 | 3 | – | | | | 26 |
| Clearwire | – | – | – | – | – | | 135 | 135 |
| Spectrum in bands in use today | 54 | 130 | 90 | 52 | – | – | 150 | 476 |
| LightSquared | – | – | – | – | 20 | | – | 20 |
| DISH Network* | – | – | – | 6 | 40 | | – | 44 |
| Broadcast** | – | – | – | 84 | – | | – | 84 |
| Federal*** | – | 10 | – | – | – | | – | 10 |
| Spectrum with visibility to use | 54 | 140 | 90 | 136 | 60 | 20 | 150 | 650 |

* Does not include sale of USM Midwest markets to Sprint

** Dish has 6 MHz of 700 MHz spectrum across 217m pops

*** Congress estimates 84 MHz could be auctioned nationwide

**** 10 MHz H-block

Source: J.P. Morgan estimates, FCC data.

acquisitions,” including Cingular’s acquisition of AT&T in 2004, AT&T’s acquisition of Dobson in 2007, Verizon’s acquisition of ALLTEL in 2008, and AT&T’s acquisition of Centennial in 2009.⁴⁴ In addition to these mega-mergers, numerous other competitive carriers have exited the market via acquisition by AT&T and Verizon, including Rural Cellular Corporation, Aloha Wireless, and Edge Wireless.⁴⁵ The GAO accordingly concluded that the “primary change in the wireless industry” over the last decade is “industry consolidation,” and noted that from 2006 to 2009, AT&T and Verizon increased

their subscriber market share by nearly 20 percent.⁴⁶

Since then, the pace of consolidation has only increased, as AT&T and Verizon not only have acquired smaller rivals but have engaged in significant spectrum-only transactions that have strengthened their position vis-à-vis competitive carriers. These transactions include Verizon’s 2012 acquisition of AWS-1 licenses from SpectrumCo and Cox,⁴⁷ AT&T’s 2012 acquisition of NextWave Wireless and its substantial WCS and AWS spectrum holdings,⁴⁸ AT&T’s 2011 acquisition of Qualcomm’s nationwide Lower 700

44 U.S. Gov’t Accountability Office, GAO-10-779, *Telecommunications: Enhanced Data Collection Could Help FCC Better Monitor Competition in the Wireless Industry*, at 11 (2010), available at <http://www.gao.gov/new.items/d10779.pdf>.

45 See *Applications of Cellco Partnership d/b/a Verizon Wireless and Rural Cellular Corporation for Consent To Transfer Control of Licenses, Authorizations, and Spectrum Manager Leases*, Memorandum Opinion and Order, [FCC 08-181] (2008); *Application of Aloha Spectrum Holdings Co. LLC and AT&T Mobility II LLC Seeking FCC Consent for Assignment of Licenses and Authorizations*, Memorandum Opinion and Order, [FCC 08-26] (2008); Press Release, AT&T Completes Acquisition of Edge Wireless to Enhance Wireless Coverage, Apr. 18, 2008, available at <http://www.att.com/gen/pressroom?pid=4800&cdvn=news&newsarticleid=25521>.

46 *Id.* at 10, 13.

47 See generally *Applications of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC and Cox TMI, LLC for Consent to Assign AWS-1 Licenses*, Memorandum Opinion and Order and Declaratory Ruling, 27 FCC Rcd 10698 (2012) (“*Verizon-SpectrumCo Order*”).

48 See generally *Applications of AT&T Mobility Spectrum LLC, New Cingular Wireless PCS, LLC, Comcast Corporation, Horizon Wi-Com, LLC, NextWave Wireless, Inc., and San Diego Gas & Electric Company for Consent To Assign And Transfer Licenses*, Memorandum Opinion and Order, 27 FCC Rcd 16459 (2012).

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MHz downlink spectrum,⁴⁹ and AT&T's proposed acquisition of Leap Wireless and its AWS and PCS spectrum. CCA's own internal analysis reveals that, in 2012, the Twin Bells accounted for nearly 55 percent of all secondary market spectrum acquisitions and 70 percent of all such acquisitions involving spectrum below 1 GHz. The chart below depicts the various mergers and acquisitions by AT&T and Verizon that have brought the industry to the brink of duopoly. (*See chart, page 11*)

This dramatic increase in consolidation and attendant decline in competition threatens to drive up retail prices,⁵⁰ reduce innovation,⁵¹ and slow job growth in an economy still recovering from the Great Recession.⁵² While consumer demand for wireless services continues to grow, the market power of AT&T and Verizon is leading to investment levels below what would occur in a more competitive environment. And competitive carriers face ongoing exclusionary actions by AT&T and Verizon, such as denial of data roaming on commercially reasonable terms and conditions and the historical lack of interoperability in the Lower 700 MHz band, that are stranding expenditures and impeding network deployment and investment.

Compounding these competitive problems, the FCC has adopted rules that affirmatively disadvantage smaller wireless carriers in the telecommunications marketplace. Most notably, the FCC's *USF/ICC Transformation Order* put in place a new method of allocating high-cost universal service support that abandons the longstanding principle of competitive neutrality,⁵³ and entrenches incumbent wireline providers, including the wireline businesses of AT&T and Verizon, at the expense of competitive wireless providers.⁵⁴

Ignoring consumers' growing preference for mobile wireless services over legacy landline networks, the *Order* slashed funding for rural wireless carriers by approximately 60 percent, creating a Mobility Fund limited to a one-time outlay of \$300 million in Phase I support and \$500 million annually for Phase II. At the same time, the *Order* significantly increased the funding available to incumbent local exchange carriers ("ILECs"); the FCC gave price-cap ILECs a right of first refusal to receive \$1.8 billion in Phase II CAF support annually, and set aside more than \$2 billion in annual funding for rate-of-return ILECs without any mechanism to make such funding available to more efficient competitive providers. Bestowing lavish subsidies on the wireline businesses of AT&T and Verizon, while dramatically cutting support for rural wireless carriers, only widens the competitive gulf between CCA's members and the Twin Bells.

⁴⁹ See generally *AT&T-Qualcomm Order*.

⁵⁰ See *AT&T/T-Mobile Staff Analysis* ¶ 48 (finding that AT&T's proposal to eliminate competitor from wireless marketplace would give AT&T unilateral incentive to raise price").

⁵¹ *Id.* ¶ 121 (finding that AT&T's efforts to eliminate competition through mergers threatened to "diminish[] innovation" in the wireless industry).

⁵² See *id.* ¶ 261 (finding that AT&T's takeover of T-Mobile would have resulted in a loss of jobs both at AT&T and across the wireless industry).

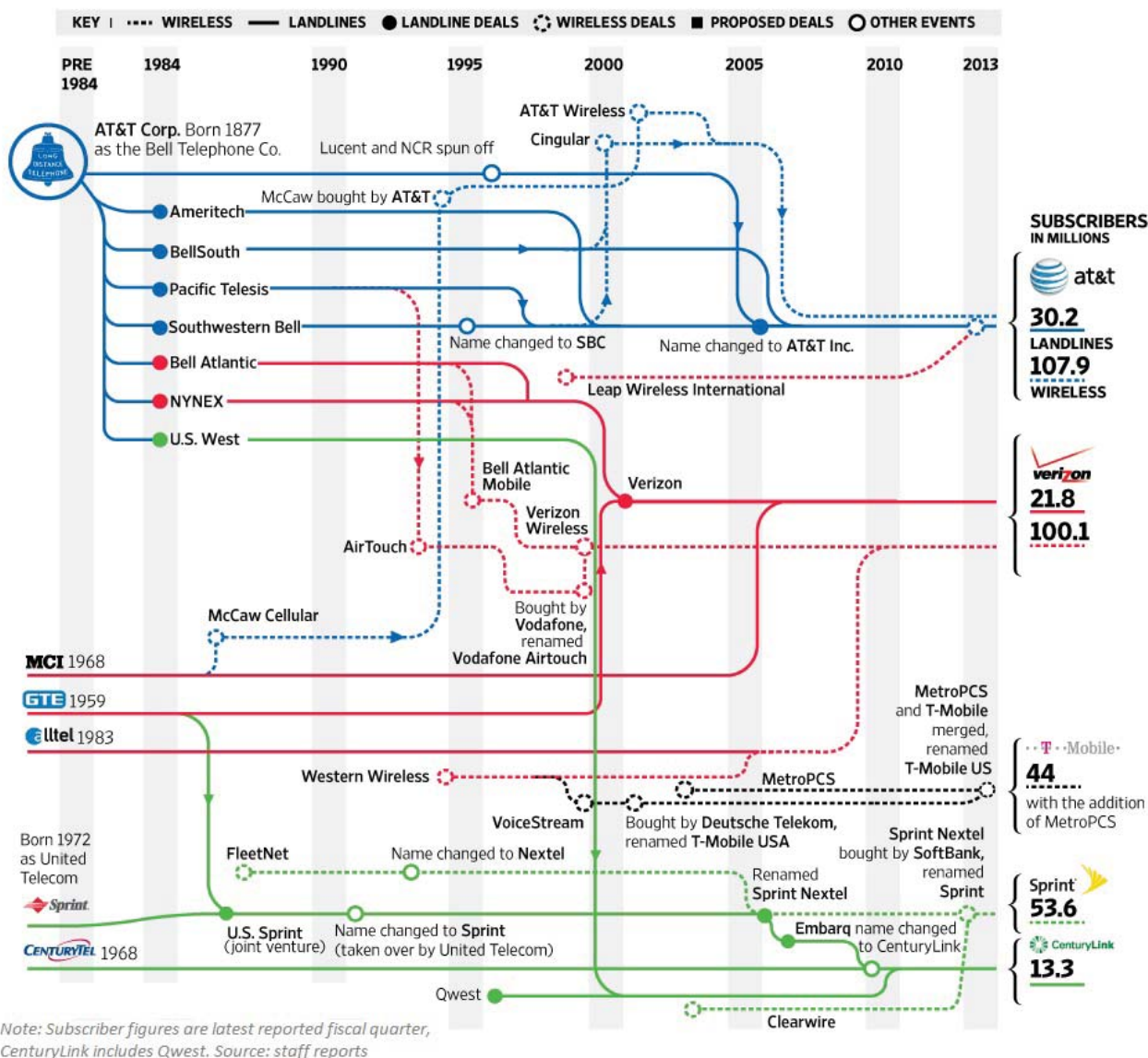
⁵³ See, e.g., *Federal-State Joint Board on Universal Service*, Report and Order, 12 FCC Rcd 8776 ¶¶ 24-27, 43-52 (1997).

⁵⁴ *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663 (2011) ("*USF/ICC Transformation Order*" or "*USF/ICC Transformation FNPRM*").

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A Changing Telecom Landscape

In 1982 AT&T agreed to break up and end its monopoly over the country's telecommunications business to settle an antitrust lawsuit with the U.S. government, with the division taking effect in 1984. In the decades since, the industry has undergone incredible change—and consolidation—with the advent of wireless communications.



Source: Wall St. J., Map: A Changing Telecom Landscape (May 6, 2013), available at <http://online.wsj.com/news/articles/SB10001424127887323372504578466962530503142>.

THE COMMISSION SHOULD TAKE DECISIVE ACTION TO RESTORE WIRELESS COMPETITION

There currently are a number of disparate proceedings, involving multiple Bureaus that affect competition in the wireless industry. Such proceedings include the spectrum screen, incentive auction, and roaming and interoperability proceedings handled by the Wireless Telecommunications Bureau along with the Media Bureau and Office of Engineering and Technology, and the IP transition and universal service reform proceedings handled principally by the Wireline Competition Bureau. In addition, there are a variety of transactions, large and small, that are reviewed by multiple offices within the Commission. But while inevitably there is informal coordination within the agency, the reality is that, in dealing with such disparate, individual proceedings, the overall focus on wireless competition has not been deemed a sufficient priority. The Commission has been addressing wireless competition issues on an *ad hoc* basis for years, and the result has been a slide back towards duopoly conditions.

The Commission can help facilitate the growing connectivity of our networks and reverse the march towards duopoly by creating a Wireless Competition Task Force. A cross-bureau, agency-wide Task Force that is identified as a core component of the Commission's agenda and mission and that taps into the resources that can be brought to bear by all relevant stakeholders would be able to shine a spotlight on competition issues and create a comprehensive vision that is necessary to prioritize the improvement of competitive conditions in the wireless industry. Commissioners, FCC staff, members of Congress and other stakeholders have all raised proposals in the recent past regarding the way

the FCC conducts business.⁵⁵ By bringing together staff from across the agency and establishing more formal leadership and accountability for relevant cross-Bureau initiatives, the Task Force would be able to undertake coordinated action on the various issues that affect wireless competition under a broad, comprehensive framework for increasing wireless competition.

The Commission has recognized the benefits of an agency-wide Task Force in bringing together different parts of the agency and creating a wide-ranging, visionary plan, as when it created the Technology Transitions Policy Task Force, which AT&T proposed and Commissioners from both sides of the aisle support. AT&T explained that such a Task Force would provide "a coordinated framework for addressing ... related issues" that until then had "been considered only in myriad widely disparate proceedings."⁵⁶ Chairman Genachowski moved quickly to create that Task Force in response to AT&T's proposal,⁵⁷ and Commissioner Pai later touted the Task Force as a vehicle to "develop a holistic set of recommendations for moving forward with" a set of related reforms.⁵⁸

Because improving competition in the wireless industry should be a principal mission of the Commission at this critical juncture, it deserves to be the subject of a similarly comprehensive team effort under the auspices of a Task Force. The Task Force should be charged with analyzing, developing, and implementing proposals for promoting effective wireless competition across bureaus and across proceedings. Above all, the goal of the Task Force should be

⁵⁵ See Chairman Wheeler First Day Perspectives.

⁵⁶ Letter of Robert W. Quinn, SVP, Federal Regulatory, AT&T Services, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25, at 1, 7 (filed Jan. 14, 2013).

⁵⁷ See "FCC Chairman Julius Genachowski Announces Formation of Technology Transitions Policy Task Force," (Dec. 10, 2012), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-317837A1.pdf.

⁵⁸ FCC, "Opening Remarks of Commissioner Ajit Pai at First Technology Transitions Policy Task Force Workshop," at 1, Mar. 18, 2013, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0318/DOC-319565A1.pdf.

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to restore the prerequisites for a well-functioning wireless marketplace, including more robust restraints on consolidation that harms competition and assurances of access to key inputs such as spectrum, devices, and networks. A Task Force would be uniquely positioned to address the wide-ranging issues that are affecting competition in the wireless industry, including the following priority areas.

IMPROVING THE “SPECTRUM SCREEN”:

The Commission’s spectrum screen lies at the heart of the agency’s efforts to evaluate the effects of proposed transactions, auction design choices and technological and economic growth. Indeed, Chairman Wheeler has said that “technological innovation, growth and national economic leadership have always been determined by our networks; competition drives the benefits of those networks; and [the FCC] ha[s] the responsibility to see to the expansion of those networks, *including the appropriate allocation of adequate amounts of spectrum.*”⁵⁹ The screen identifies spectrum acquisitions (either in the secondary market or at auction) that may give an entity control over too much spectrum in a given area. CCA has proposed adopting (1) a separate screen for local spectrum holdings below 1 GHz (to supplement the existing screen applicable to overall local holdings); (2) a new nationwide screen; (3) a clear and predictable mechanism for adding (or removing) spectrum from the analysis; and (4) a heightened level of scrutiny for transactions exceeding any applicable screen threshold.⁶⁰ Notably, the Department of Justice recently submitted a paper to the Commission explaining that “rules that ensure the smaller nationwide networks, which currently lack substantial low-frequency spectrum, have an opportunity to acquire such spectrum could improve the competitive dynamic among nationwide carriers and benefit consumers.”⁶¹ Guidance also can be drawn from the experience of other developed countries, virtually all of which have differentiated between spectrum above and below 1 GHz to prevent aggregation of low-frequency spectrum.⁶² Industry Canada, for example, recently issued an updated “Framework Relating to Transfers, Divisions and Subordinate Licensing

of Spectrum Licences for Commercial Mobile Spectrum,” which considers, among other things, “the ability of the Applicants and other existing and future competitors to provide services, given the post-transfer concentration of commercial mobile spectrum in the affected License area(s)” and “the relative utility (e.g. above and below 1GHz) and substitutability of the licensed spectrum.”⁶³

An improved spectrum screen will be instrumental to improving the Commission’s oversight of secondary market transactions. The Commission’s record on this score has been mixed in recent years; while it appropriately supported the Department of Justice’s findings related to AT&T’s failed attempt to acquire T-Mobile, it nevertheless has approved many other significant acquisitions by AT&T and Verizon. In reviewing any further acquisitions by the Twin Bells, the Commission should make sure to hold them to their burden of demonstrating that the acquisition would benefit competition and consumers. The Task Force should be charged with completing its reforms to the spectrum screen as soon as possible. Moreover, going forward, the Task Force would be well situated to evaluate transactions in the broader context of the competitive conditions of the industry and in light of other, parallel proceedings that may be affected by transactions.

CONDUCTING FAIR AND PROCOMPETITIVE SPECTRUM AUCTIONS:

The Commission has an excellent opportunity to stoke wireless competition through the upcoming incentive auction of spectrum currently allocated for broadcast television. CCA has urged the Commission to design its auction rules in a manner that gives carriers of all sizes a meaningful opportunity to acquire spectrum where needed, rather than simply allowing AT&T and Verizon to use their vast resources to dominate the auction. In particular, the Commission should adopt eligibility rules that will prevent excessive spectrum aggregation; bidding credits and related mechanisms that will promote participation by rural, mid-size and regional carriers; and transparent auction rules that give competitive carriers a meaningful opportunity to participate. The Task Force should make recommendations on auction design and

59 Chairman Wheeler First Day Perspectives (emphasis added).

60 See Comments of the Competitive Carriers Association, WT Docket No. 12-269 (filed Nov. 28, 2012).

61 Ex Parte Submission of the U.S. Dep’t of Justice, WT Docket No. 12-269, at 1 (filed Apr. 11, 2013).

62 See Letter of Rebecca Murphy Thompson, General Counsel, CCA, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 12-269 (filed Sept. 4, 2013) (describing international consensus on the qualitative differences between high- and low-frequency spectrum for mobile broadband deployment and the competitive importance of aggregation limits in the upcoming incentive auction); Sprint Nextel Comments, WT Docket No. 13-135, at 22-24 (filed June 17, 2013) (recounting statements by (1) Ofcom, the United Kingdom’s regulatory and competition authority for telecommunications; (2) the Radio Spectrum Policy Group of the European Union; (3) the policymaking body for telecommunications in Germany; (4) the Netherlands Ministry of Economic Affairs; and (5) Comreg, the Irish regulator, all recognizing the differences in spectrum above versus below 1 GHz) (CCA International Ex Parte).

63 Industry Canada, Framework Relating to Transfers, Divisions and Subordinate Licensing of Spectrum Licenses for Commercial Mobile Spectrum, DGSO-003-13, at 8, ¶¶ 39-40 (June 2013), available at <http://tinyurl.com/fhny6v>.

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eligibility criteria with an eye towards understanding how auction design can promote the broader vision of improving competitive conditions in the wireless industry.⁶⁴ In designing the auction, the Commission should heed the lessons learned in recent spectrum auctions held in the Netherlands, Canada, and other countries.⁶⁵ Most recently, in its auction of 700 MHz spectrum, New Zealand regulators adopted rules limiting bidders to three 2x5 MHz blocks of spectrum, or one-third of the 90 MHz of spectrum being made available.⁶⁶ The ministry in charge of the auction also crafted contingency rules (including potentially relaxing the initial aggregation limits) should parcels of spectrum remain unsold after the initial auction round closes.⁶⁷ Similarly, in the recent Dutch auction of 800 and 900 MHz spectrum, the Ministry of Economic Affairs (the regulating authority for Dutch spectrum) established set-asides for low-band spectrum in an effort to create a more competitive auction. More specifically, the Ministry of Economic Affairs crafted rules for the set-aside of (a) two 5 MHz paired spectrum blocks in the 800 MHz spectrum being auctioned and (b) one 5 MHz paired spectrum block in the 900 MHz spectrum being auctioned for “newcomers,” or applicants who were not license holders as of July 16, 2012 of one or more licenses for frequencies within 880-915 MHz and 925-960 MHz, or part of a group of which one or more members was a license holder for those frequencies.⁶⁸ Rather than depressing auction revenue, the auction raised far more funds than initially projected.⁶⁹ Particularly of note, this practice was in stark contrast to the Dutch spectrum auctions in 2000, in which the Dutch government rejected mechanisms to prevent the entrenched incumbents from aggregating all available licenses.⁷⁰ As a result, the Dutch

auction in 2000 failed to attract widespread participation. Labeled a “disaster” by one prominent auction economist, the auction raised a mere \$2.5 billion instead of the \$8.5 billion that Dutch government had forecast.⁷¹

These examples show that properly crafted eligibility rules can promote participation while simultaneously driving up auction revenues. Two recent economic studies analyzing these and other international examples underscore this point. The first study, by Professors Martin Cave and William Webb, exhaustively demonstrated through empirical evidence that restrictions adopted by various European regulators on the amount of sub-1 GHz spectrum that operators can acquire at auction have not resulted in *any* reduction in auction revenue in those countries.⁷² The second study, by Dr. Peter Cramton, analyzes several other international examples of spectrum aggregation limits at auctions, and finds that such limits not only stimulate competition but also *increase* auction proceeds, resulting in high—and in some cases record-breaking—revenues for the government.⁷³ These studies dovetail with a recent paper by former Chairman Reed Hundt and Dr. Gregory Rosston, which supports the imposition of *ex ante* caps in U.S. spectrum auctions in order to reduce uncertainty and encourage participation by competitive carriers.⁷⁴

In addition, the Commission should ensure, in the upcoming 600 MHz auction and in all future spectrum auctions, that the service rules for auctioned spectrum bands include an interoperability requirement. Indeed, device interoperability is a prerequisite to a well-functioning wireless marketplace; it encourages innovation, gives consumers more choices, and reduces costs to end users.⁷⁵ Interoperability also

64 For example, as one commenter recently noted, “if AT&T and Verizon are willing to pay a premium for spectrum, it may simply be because they have the most to lose from a more competitive market. In other words, their primary goal might not be to expand their own networks so much as to prevent anyone else from expanding theirs. And if that’s true, then the higher revenues from an unrestricted auction would effectively be a tax on future wireless customers, just as royal monopolies were a tax on 16th century consumers.” Posting of Timothy B. Lee to The Washington Post’s The Switch, <http://www.washingtonpost.com/blogs/the-switch/wp/2013/11/13/wireless-competition-is-good-for-consumers-even-if-it-costs-taxpayers-extra/> (Nov. 13, 2013, 12:23 ET) (emphases added) (*Wireless Competition is Good for Consumers—Even if it Costs Taxpayers Extra*).

65 See CCA International *Ex Parte* (highlighting broad international consensus on special competitive significance of spectrum below 1 GHz, and development of auction rules to prevent undue aggregation of such spectrum).

66 *Ex Parte* Letter of Trey Hanbury, Hogan Lovells US LLP, Counsel to T-Mobile USA, Inc., to Marlene Dortch, FCC, GN Docket No. 12-268 & WT Docket No. 12-269 at 2 (Oct. 28, 2013).

67 *Id.*

68 Dutch Ministry of Economic Affairs, *Regulation Regarding the Application and Auction Procedure for 800, 900 and 1800 MHz Licenses* 1, 2-6, 83 (Complimentary English translation, July 10, 2012), available at www.agentschaptelecom.nl/onderwerpen/mobiele-communicatie/Multibandveiling (click on “courtesy-translation-auction-rules” under the “Downloads” menu on the right side of the page).

69 Maarten van Tartwijk, *Netherlands Raises €3.8 Billion from 4G Spectrum Auction*, Total Telecom (Dec. 17, 2012), available at <http://www.totaltele.com/view.aspx?ID=478411>.

70 *The price is right*, The Economist (July 27, 2000), available at <http://www.economist.com/node/340821> (“One simple rule for the auctions is that there should be more licenses than existing operators. The British heeded this, and reserved the biggest slice of spectrum for a new entrant. Sadly, the Dutch did not. Their five licenses were snapped up cheaply by the five incumbents.”)

71 Ken Binmore and Paul Klemperer, *The Biggest Auction Ever: The Sale of the British 3G Telecom Licenses*, at C93 (March 2012), <http://www.nuff.ox.ac.uk/users/klemperer/biggestpaper.pdf>.

72 See Martin Cave and William Webb, *Spectrum Limits and Auction Revenue: The European Experience*, attached to *Ex Parte* Letter of Rafi Martina, Sprint, to Marlene Dortch, FCC, WT Docket Nos. 12-268, 12-269 (Jul. 29, 2013).

73 See Peter Cramton, *The Rationale for Spectrum Limits and Their Impact on Auction Outcomes* (Sep. 9, 2013) attached to *Ex Parte* Letter of T-Mobile USA, Inc., to Marlene Dortch, FCC, GN Docket No. 12-268 & WT Docket No. 12-269 (Sep. 9, 2013).

74 *Hundt/Rosston Paper* at 16-17.

75 Chairman Wheeler also has noted the benefits of interoperable systems. Tom Wheeler, “Making Our History,” Mobile Musings, Dec. 1, 2011, available at <http://www.mobilemusings.net/2011/12/making-our-history.html>

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makes roaming technologically possible; non-interoperable devices simply cannot roam on other carriers' networks. The service rules for most bands designated for wireless telecommunications services included interoperability mandates at the time those frequencies were allocated, including the Cellular, Personal Communications Services ("PCS"), and Advanced Wireless Services ("AWS") bands. The Commission initially failed to do so for the 700 MHz band, but eventually implemented and codified an industry-forged interoperability agreement four years after the auction, once it became apparent that AT&T had succeeded in frustrating interoperability in the band. In the meantime, competitive carriers with spectrum in the Lower 700 MHz A Block, without access to interoperable devices, were forced to sit on the sidelines while AT&T and Verizon got a head start on deploying 4G LTE throughout the country. The Task Force should work to make sure that the Commission does not repeat this mistake in any future spectrum auction.

ENSURING COMMERCIALLY REASONABLE ACCESS TO DATA ROAMING ARRANGEMENTS:

CCA applauds the Commission's adoption of rules requiring facilities-based mobile wireless providers to offer data roaming on fair and reasonable terms,⁷⁶ and is pleased that the D.C. Circuit upheld those rules against a challenge by Verizon.⁷⁷ But as the latest Wireless Competition Report acknowledges, "the ability to negotiate data roaming agreements on non-discriminatory terms and at reasonable rates remains a concern," particularly where a competitive carrier cannot discern whether the terms and conditions offered by AT&T and Verizon are in line with those offered to other carriers.⁷⁸ The Task Force thus should investigate whether AT&T or Verizon are using their market power to artificially inflate roaming rates or delay roaming negotiations with competitive carriers so that arbitrators in data roaming disputes are equipped to determine whether the rates offered in a particular case are commercially unreasonable.

MAINTAINING BASELINE INTERCONNECTION AND ACCESS OBLIGATIONS IN THE IP ERA:

In addition to ensuring access to the Twin Bells' wireless networks, the Commission should safeguard competitive carriers' ability to interconnect with and gain reasonably priced access to the facilities of (e.g., backhaul) the wireline networks of AT&T, Verizon, and other incumbent LECs. In particular, the Commission should reject calls from large incumbent carriers to forbear from applying statutory interconnection obligations in areas where such carriers upgrade their networks from time division multiplexing ("TDM") technology to Internet Protocol ("IP") technology.⁷⁹ "Basic interconnection regulations . . . have been a central tenet of telecommunications regulatory policy for over a century,"⁸⁰ and the Commission should reaffirm that such requirements do not vary according to the underlying network technology. Chairman Wheeler has championed these principles in the past,⁸¹ and recently broadly outlined how to "encourage technological change while preserving the attributes of network services that customers have come to expect" – a set of values Chairman Wheeler calls the Network Compact.⁸² As part of this transition, the Commission should evaluate the competitive landscape for wireline-based services on both a retail and wholesale level. While some studies tout the emergence of *retail* wireline competition in arguing against regulation,⁸³ these studies do *not* demonstrate that the *wholesale* market for interconnection services is competitive or warrants deregulation. To the contrary, the Commission has recognized that the importance of ubiquitous network connectivity justify the continued application of interconnection mandates even in areas where robust facilities-based competition between ILECs and cable telephony providers has emerged at the retail level.⁸⁴ The Task Force will be well-positioned to evaluate IP transition issues that affect the wireless industry through the lens of the broader competitive constraints that impact the interactions between competitive carriers and incumbent LECs, including AT&T and Verizon.

⁷⁶ See generally *Data Roaming Order*.

⁷⁷ *Cellco P'Ship v. FCC*, 700 F.3d 534 (D.C. Cir. 2012).

⁷⁸ 16th *Wireless Competition Report* ¶ 210.

⁷⁹ See AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, at 22 (filed Nov. 7, 2012).

⁸⁰ NATIONAL BROADBAND PLAN at 49.

⁸¹ See Chairman Wheeler First Day Perspectives ("[A] change in technology may occasion a review of the rules, but it does not change the rights of users or the responsibilities of networks."); see also Tom Wheeler, "Networks are More Powerful than Nations," *Mobile Musings*, Jan. 28, 2011, available at <http://www.mobilemusings.net/2011/01/networksare-more-important-than.html> ("Networks empower the connected. The greater the network connectivity, the greater that empowerment").

⁸² The IP Transition: Starting Now, <http://www.fcc.gov/blog/ip-transition-starting-now> (Nov. 19, 2013).

⁸³ See, e.g., Anna-Maria Kovacs, *Telecommunications Competition: The Infrastructure-Investment Race* (Oct. 8, 2013), available at http://internetinnovation.org/images/misc_content/study-telecommunications-competition-09072013.pdf.

⁸⁴ See, e.g., *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160 in the Omaha Metropolitan Statistical Area*, Memorandum Opinion and Order, 20 FCC Rcd 19415 ¶ 86 (2005) (recognizing that, even though the emergence of facilities-based competition in Omaha justified forbearance from unbundling requirements, granting forbearance from interconnection requirements would be inappropriate because the ILEC, as the only carrier with a ubiquitous network, would retain the "ability to exercise market power over interconnection").

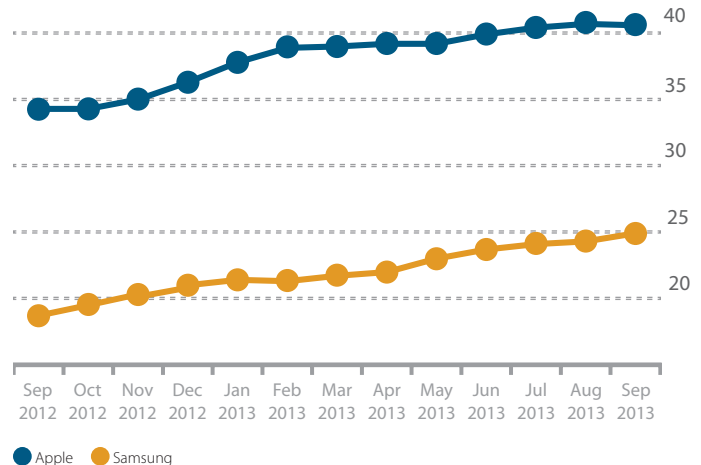
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PROMOTING CONSUMER ACCESS TO AND PRESERVING CONSUMER CHOICE OVER HANDSETS AND OTHER DEVICES: As noted above, handsets are another key input for competitive carriers. Currently, two equipment manufacturers, Apple and Samsung, dominate the handset marketplace (See graph, right).⁸⁵

In the middle of 2013, Apple and Samsung together held a combined 65.5 percent of the U.S. smartphone subscriber market share, while third place HTC only accounted for 7.1 percent of subscribers. This is particularly troubling when at least one of these manufacturers has a reputation of “famously demanding contracts” and an overall “high handed approach.”⁸⁶ Samsung, on the other hand, pulled in \$5.1 billion of a total \$5.3 billion—or 95 percent—of global profits from Android smartphone sales reported during the first quarter of 2013.⁸⁷ In parallel with this increased market share, the two largest wireless providers have used various methods to restrict competitive carriers’ access to such devices. Meanwhile, rural and regional America continues to face challenges accessing smartphones, particularly as rural carriers need additional spectrum resources to deploy 4G data networks.⁸⁸

For example, as CCA has documented, AT&T and Verizon have a lengthy history of entering into exclusive device arrangements that enable them to control access to the latest, most desirable devices.⁸⁹ AT&T currently has an exclusive arrangement to sell the iconic Samsung Galaxy S4 Active, as well as the new Nokia Lumia 1520 “phablet.” And even where competitive carriers are not immediately foreclosed from access to devices through exclusive distribution agreements, these carriers routinely run into closed doors by equipment manufacturers, unwilling to negotiate for procurement of their devices.

Share (%) of Smartphone Subscribers



Beyond efforts to frustrate *competitors*’ access to devices, AT&T and Verizon typically sell “locked” handsets to *consumers*, which cannot be used once a subscriber has changed providers. While such handsets can be “unlocked” if the OEM allows, the Copyright Office recently eliminated an exemption to the Digital Millennium Copyright Act allowing subscribers to do so without violating copyright law.⁹⁰ The White House has expressed its strong disagreement with that decision, explaining that “consumers should be able to unlock their cell phones without risking criminal or other penalties,” and that unlocking is “important for ensuring we continue to have the vibrant, competitive wireless market that delivers innovative products and solid service to meet consumers’ needs.”⁹¹ CCA agrees with the White House—and with Chairman Genachowski, who said that a ban on unlocking “raises serious competition and innovation concerns.”⁹² CCA

85 Press Release, comScore Reports September 2013 U.S. Smartphone Subscriber Market Share, Nov. 5, 2013; *see also* Press Release, comScore Reports August 2013 U.S. Smartphone Subscriber Market Share, Oct. 4, 2013; Press Release, comScore Reports July 2013 U.S. Smartphone Subscriber Market Share, Sept. 6, 2013; Press Release, comScore Reports June 2013 U.S. Smartphone Subscriber Market Share, Aug. 7, 2013; Press Release, comScore Reports May 2013 U.S. Smartphone Subscriber Market Share, June 28, 2013; Press Release, comScore Reports April 2013 U.S. Smartphone Subscriber Market Share, June 4, 2013; Press Release, comScore Reports March 2013 U.S. Smartphone Subscriber Market Share, May 3, 2013; Press Release, comScore Reports February 2013 U.S. Smartphone Subscriber Market Share, Apr. 4, 2013; Press Release, comScore Reports May 2013 U.S. Smartphone Subscriber Market Share, June 28, 2013; Press Release, comScore Reports January 2013 U.S. Smartphone Subscriber Market Share, Mar. 6, 2013; Press Release, comScore Reports December 2012 U.S. Smartphone Subscriber Market Share, Feb. 6, 2013 (*each available at* http://www.comscore.com/Insights/Press_Releases).

86 Caroline Gabriel, All Three Russian Leaders Dump iPhone, Rethink Wireless (July 16, 2013), *available at* <http://www.rethink-wireless.com/2013/07/16/all-russian-leadersdump-iphone.htm>.

87 Ben Munson, Report: Samsung Accounts for Nearly Half of All Android Web Traffic in U.S., Wireless Week (July 17, 2013), *available at* <http://www.wirelessweek.com/news/2013/07/> (articles sorted by date).

88 See U.S. Census Bureau, Pub. No. P20-569, Computer and Internet Use in the United States: Population Characteristics 12 (May 2013), *available at* <http://www.census.gov/prod/2013pubs/p20-569.pdf> (“At least one driver of smartphone use is the ability to access mobile telecommunications technology, such as ‘3G’ or ‘4G’ data networks . . . [T]he percentage of smartphone users in metropolitan areas (50.0 percent) was significantly higher than for nonmetropolitan areas (38.9 percent), a difference at least somewhat attributable to these high-speed data networks being more readily available in urban areas.”).

89 See, e.g., Rural Cellular Association, Petition for Rulemaking Regarding Exclusivity Arrangements Between Commercial Wireless Carriers and Handset Manufacturers, RM-11497 (filed May 20, 2008).

90 See *Exemption on Prohibition of Copyright Protection Systems for Access Control Technologies*, 77 Fed. Reg. 65,260, 65,265-66 (Oct. 26, 2012).

91 White House, “It’s Time to Legalize Cell Phone Unlocking,” Mar. 4, 2013, *available at* <https://petitions.whitehouse.gov/petition/make-unlocking-cell-phones-legal/1g9KhZGZ>.

92 FCC, “Statement from FCC Chairman Julius Genachowski on the Copyright Office of the Library of Congress Position on DMCA and Unlocking New Cell Phones,” Mar. 4, 2013, *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0304/DOC-319250A1.pdf.

Discussion

also agrees with Acting Chairwoman Clyburn that “consumers who satisfy the reasonable terms of their contracts should not be subject to civil and criminal penalties if they want to take their device to a new carrier.”⁹³

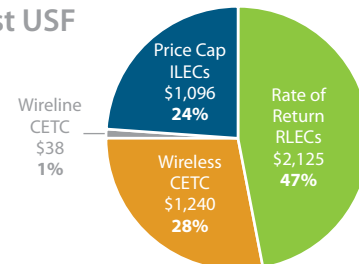
CCA will work with the Commission more broadly to ensure that competitive carriers have access to popular devices and can offer those devices to consumers at prices comparable to AT&T and Verizon. However, OEM involvement is critical. While Verizon and AT&T may have recently adopted new unlocking policies, many OEMs manufacture and sell “locked” devices to the carriers without the carriers’ direction and sometimes knowledge. To that end, the Task Force should hold one or more informational workshops on OEM device procurement, similar to workshops held on device interoperability issues⁹⁴ and the upcoming incentive auction.⁹⁵ As Chairman Wheeler recently noted on the issue of device unlocking, “enough time has passed, and it is now time for the industry to act voluntarily or for the FCC to regulate.”⁹⁶ In addition, these workshops should collect data on the competitive effects of device exclusivity arrangements, the financial advantages (both in terms of device sales as well as subscriber churn) of exclusivity contracts, obstacles faced by competitive carriers in obtaining access to devices, and other relevant data points. Meanwhile, CCA will also continue to encourage the Commission to coordinate with the Copyright Office and Congress in restoring the exemption.

REVIEWING USF POLICIES TO RESTORE COMPETITIVE NEUTRALITY: Finally, as part of the ongoing and iterative process to reform USF, the Commission should take action to restore competitive neutrality to its high-cost support mechanisms. The chart to the side shows unjustified increase of high-cost support for ILECs and the dramatic and detrimental reduction in funding for rural wireless carriers.

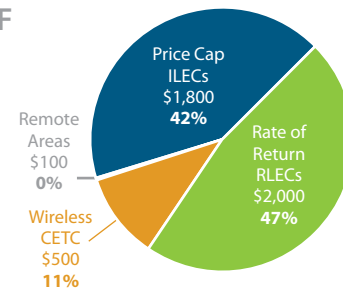
The *USF/ICC Transformation Order* only deepened the competitive divide in the industry by significantly increasing the funding available to ILECs, including those

Universal Service Reform Impact Existing Recipients

2011 High Cost USF Support, \$M



2013 - 2017 CAF Support, \$M



affiliated with AT&T and Verizon, while drastically reducing support for rural wireless carriers. But the *USF/ICC Transformation FNPRM* did leave the door open to modifications that could diminish the wireline preferences embedded in the *USF/ICC Transformation Order*. For example, the *FNPRM* contemplates various rule changes that would diminish support potentially available to ILECs in the future—which in turn would free up additional funding that could be redirected to competitive wireless carriers, consistent with consumer preferences. CCA has joined a broad coalition of stakeholders urging the Commission to take every opportunity in its USF reform proceeding to put its support mechanisms on a more competitively and technologically neutral path.⁹⁷ As this reform effort continues, the Task Force will be well suited to ensure that such reforms advance, rather than undermine, competition in the wireless marketplace.

93 Acting FCC Chairwoman Mignon Clyburn Issues Statement on the Importance of Cellphone Unlocking to Consumers (Aug. 22, 2013), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0822/DOC-322959A1.pdf.

94 See, e.g., Federal Communications Commission, Workshop on the Interoperability of Customer Mobile Equipment Across Commercial Spectrum Blocks in the 700 MHz Band (Apr. 26, 2011), available at <http://www.fcc.gov/document/federal-communications-commission-announces-agenda-workshop-interoperability-customer-mobil>.

95 See, e.g., Federal Communications Commission, Broadcaster LEARN Program Workshop (Oct. 26, 2012), available at <http://wireless.fcc.gov/learn/LEARN-Deck-12-5-12.pdf>; Federal Communications Commission, Incentive Auctions - LEARN - A Groundbreaking Event for the Broadcast Television, Mobile Wireless, and Technology Sectors of the U.S. Economy, available at <http://wireless.fcc.gov/incentiveauctions/learnprogram/index.html>; Federal Communications Commission, LEARN Workshop: 600 MHz Band Plan (May 3, 2013), available at <http://www.fcc.gov/events/learn-workshop-600-mhz-band-plan>.

96 Letter from The Hon. Tom Wheeler, Chairman, FCC to Steve Largent, President and CEO, CTIA – The Wireless Association (Nov. 14, 2013).

97 See Ex Parte Letter of Rebecca Thompson (CCA), Ross Lieberman (ACA), Steven Morris (NCTA), Matt Larsen (WISPA), Dean Marson (EchoStar), Jeffrey Blum (DISH Network), and Michael Repelyea (ViaSat), WC Docket No. 10-90 et al. (filed Aug. 3, 2012).

RESTORING COMPETITION FOR THE BENEFIT OF CONSUMERS

On a final note, protection of the competitive process should be valued over protecting individual competitors,⁹⁸ and CCA agrees that government policies neither should artificially prop-up any particular business plan or technology, nor cement in place any incumbent. A focus on competition is the best form of consumer protection, and robust competition protects consumers in more dynamic and effective ways than regulation.

In that vein, consumers, policymakers and industry stakeholders should be mindful that a decline in competition could spur the need for heavy-handed regulation, in an attempt to artificially recreate the benefits of competition for consumers. But this sort of *ex post* regulation is not likely to have the same dynamic and innovative results “that could have been” had competition not been foreclosed in the first instance. At the same time, the Commission must be aware of the unique mandates from Congress under the Communications Act.

CCA is confident that this Commission is capable of finding the right balance between regulation and innovation that will allow for the new, fourth network revolution to take hold both now and in the future. What is clear is that, based on all the available evidence, the wireless industry is at a tipping point. And what hangs in the balance is much more than just the fate of wireless carriers; indeed, what must be protected is *consumers’* access to the network, so that all of the opportunities, freedoms and empowerment that come with that access are also protected. Given the existing (and worsening) marketplace dynamics, the FCC should take a more prominent role in promoting a competitive communications marketplace.⁹⁹

A decline in competition could spur the need for heavy-handed regulation, in an attempt to artificially recreate the benefits of competition for consumers.

⁹⁸ See, e.g., *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128, 135 (1998).

⁹⁹ See, e.g., Howard A. Shelanski, *Justice Breyer, Professor Kahn, and Antitrust Enforcement in Regulated Industries*, 100 Cal. L. Rev. 487 (2012), available at <http://scholarship.law.berkeley.edu/californialawreview/vol100/iss2/7/>.

Conclusion

As we continue the work of guiding history's fourth network revolution, we should be mindful that "the challenge for those of us living history at this moment is to step forward, embrace the challenge and implement the solutions that the miracle of wireless connectivity enables."¹⁰⁰ The wireless industry is at a critical juncture, having undergone tremendous consolidation over the last decade that has reduced competition and conferred significant market power on AT&T and Verizon. The Commission should act decisively to restore competition and all the benefits it entails, including the efficient allocation of scarce resources, greater innovation, lower consumer prices, and increased quality of goods and services. A Wireless Competition Task Force will serve as an important catalyst for restoring the conditions necessary to allow competition to flourish.

* * * * *

The foregoing discussion demonstrates the wide range of issues that affect competition in the wireless industry. The creation of a Task Force that cuts across silos and compartmentalized thinking will promote the Commission's competition policy across these disparate areas. To be sure, the Commission currently has a handful of pending proceedings touching on many of the priorities discussed above, including spectrum aggregation, spectrum auctions, and the TDM-to-IP transition. And the Commission, with the strong leadership of Acting Chairwoman Clyburn, recently played an important role in fostering an industry solution to the interoperability problems that have long frustrated competition and broadband deployment in the Lower 700 MHz Band. There is far more work to be done to jumpstart competition. Indeed, given the disturbing decline in wireless

"The challenge for those of us living history at this moment is to step forward, embrace the challenge and implement the solutions that the miracle of wireless connectivity enables."

competition in recent years, the Commission should undertake a more concerted, comprehensive, agency-wide approach to this multifaceted problem. A Task Force will be the most effective mechanism to ensure urgent attention to the wide-reaching reforms that the wireless industry so desperately needs, and CCA looks forward to working with the Commission to make the Task Force a reality.

¹⁰⁰ Tom Wheeler, "Making Our History," Mobile Musings, Dec. 1, 2011, available at <http://www.mobilemusings.net/2011/12/making-our-history.html>.

About CCA

CCA is the nation's leading association for competitive wireless providers and stakeholders across the United States. The licensed service area of CCA's more than 100 carrier members covers 95 percent of the nation. Visit www.competitivecarriers.org.



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